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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/390,420	09/03/1999	BARRY W. FIELD	062891.0368	6854
7590 09/21/2004				
BAKER & BOTTS L L P 2001 ROSS AVENUE DALLAS, TX 752012980				
EXAMINER BLOUNT, STEVEN				
ART UNIT		PAPER NUMBER		
2661				

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/390,420

Applicant(s)

FIELD ET AL.

Examiner

Steven Blount

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-26 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 – 12 and 14 - 28 are rejected under 35 U.S.C. 103(a) as being obvious over Applicants Admitted Prior Art (AAPA) in view of U.S. patent 6,778,503 to Sproat et al.

With regard to claim 1, AAPA teaches the problem associated with transmitting CAS for DS-0 channels, wherein the CAS bits (second component) are provided at a *reduced rate* relative to the first (DS-0) components, wherein the CAS bits are carried at the end of a superframe, which increases bandwidth by fifty percent. AAPA does not however teach the solution to this problem to comprise segmenting the traffic streams into cells and distributing the CAS components in the payloads of the cells, wherein the second components are positioned at the beginning of the payload of each cell.

Sproat et al teaches streams with data (first component), and channel associated signaling (second component), the first and second components associated with each other as described in col 9 lines 50+ and col 10 lines 12+; segmenting into cells (col 9, line 50+), and distributing signaling into the payload of the cells: "since the 48 byte payload of an AAL 0 cell is convenient for packaging of CAS data" (col 9, lines 58+). In col 10 lines 38+, it is stated that in figure 6, it is shown how the CAS bits are packed

alone. See figure 6, and note how they are packed at the beginning. See also col 10 lines 14+ where it is stated: "A first 3 bytes 501-503 of the payload are occupied by channel associated signaling data ABCD and tone signaling data of two E1 circuit switched channels. The channel associated signaling data of each channel occupies 4 bits of a single byte of the 48 byte ATM payload, followed by two successive bytes reserved for each of the two E1 circuit switched channels." See also figure 5.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have segmented the traffic streams of AAPA into cells and distributed the CAS components in the payloads of the cells, wherein the second components are positioned at the beginning of the payload of each cell, in light of the teachings of Sproat et al, in order to increase the bandwidth of the channel.

With regard to claim 2, the second components are evenly distributed in figure 4.

With regard to claim 3, the first component is segmented into a fixed position in figure 4.

With regard to claim 4, superframes are mentioned in AAPA, and are suggested in Sproat et al (col 11 line 32; col 15 line 5; col 16 line 60).

With regard to claim 5, distributing the second component in the cells is discussed in Sproat et al.

With regard to claim 6, the CAS values from AAPA are derived from superframe information.

With regard to claim 7, the CAS values are control information.

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With regard to claim 8, DS-0 and CAS are discussed in AAPA. See also col 10 line 44 of AAPA.

With regard to claims 9 – 11, ATM and AAL are mentioned in AAPA and Sproat et al.

With regard to claim 12, see page 3 line 18 of AAPA. See also how the byte numbers are provided in figures 5 – 7, wherein 4 bits would be a typical number of bits to represent these values.

With regard to claim 14, see the rejections above.

With regard to claims 15 – 16, see page 8, lines 27+ of AAPA, where a discussion of a "standard telephony connection" is given, wherein it is stated that under North American telephony standards, a superframe includes 24 frames, and under European telephony standards, a superframe includes 16 frames, wherein it would be obvious to use these standard specifications in order to be able to conduct communication in systems in these countries.

With regard to claims 17 – 28, see the rejections above.

3. Claim 13 is rejected under 35 U.S.C. 103(a) as being obvious over Applicants Admitted Prior Art (AAPA) in view of U.S. patent 6,778,503 to Sproat et al as applied above, and further in view of U.S. patent 6,243,382 to O'Neill et al.

AAPA/Sproat et al teach the invention as described above but do not teach storing the second components in memory. This is taught in O'Neill et al. See col 2 lines 55 – 60 of O'Neill et al, and also note col 11 line 10 of Sproat et al. It would have been

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obvious to store the CAS values in memory in AAPA/Sproat et al in order to facilitate the assembly of the superframes.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Examiner Steven Blount may be reached at 703-305-0319 between the hours of 9:00 and 5:30 Monday through Friday.


Ajit Patel
Primary Examiner

SB


9/15/04